Specifications for Variable Optical Pulse Generator

This procurement is for the purchase of a variable optical pulse generator system. The system shall consist of Mainframes plus various Plug-In Modules.

1) Qty = 2, Universal Pulse Generator Mainframe, Model 6040 OR Equal Brand in accordance with the following specifications:

Internal Trigger	0.01Hz to 100 MHz, Accuracy: 0.01% of setting
Pulse Width	3 ns to 640 S, resolution of 1 ns or 5 digits, accuracy 0.2%, jitter 25 ps or 0.005%.
Delay	0 ns to 640 S, resolution of 1 ns or 5 digits, accuracy 0.2%, jitter 25 ps or 0.005%.
Trig Out	A 3 ns wide, 2V high T0 pulse into 50 ohms.
Pulse Out	A positive 4V pulse into 50 ohms. 1 ns risetime, 1.5 falltime.
ECL Out	An ECL level output into 50 ohms. 700 ps risetime.
External Trigger	0 to 100 MHz, slope select and threshold adjust, 50 ohm input impedance.
Single Cycle	A push button initiates a single pulse cycle.
Double Pulse	A pair of identical Width pulses separated by the Delay for each event.
Impulse	A sub-ns impulse is provided for each event. (optical only)
External Drive	An incoming waveform drives a modules output between two selected levels.
External Modulation	Analog or digital signals modulate the output of an optical module with high bandwidths. (optical only)
CW Mode	Constant light level outputs. (optical only)

2) Qty = 2, Optical Pulse Generator Module, 405 nanometer, Model 040 OR Equal Brand in accordance with the following specifications:

Spectral Peak	=	405 nm +/- 15 nm
Spectral Width	</=	5 nm
Power Levels	=	Variable, 0-5 mW
Resolution	</=	30 uW
Rise Time	</=	2 ns
Fall Time	</=	3 ns
Dynamic Range	>/=	13 dB
Fiber Type	9/125 Single Mode Fiber singlemode Connector	
Fiber Connector	FC/APC	
Trigger	Internal 0.01 Hz to 100 MHz; external 0 to 100 MHz.	
Pulse Width	Internal 3 ns to 640 s.	
Impulse	2 ns typical (fixed).	
Delay	0 to 640 s (plus fixed delay)	
Module Delay	10 ns typical (fixed) mainframe's Pulse Out to module's light output. Jitter 100 ps rms.	

3) Qty = 1, Optical Pulse Generator Module, 650 nanometer, Model 065 OR Equal Brand in accordance with the following specifications:

Spectral Peak	=	650 nm +/- 5 nm
Spectral Width	</=	5 nm
Power Levels	=	Variable 0-2 mW
Resolution	</=	100 uW
Rise Time	</=	1 ns
Fall Time	</=	1 ns
Dynamic Range	>/=	13 dB
Fiber Type	6/125 Single Mode Fiber singlemode Connector	
Fiber Connector	FC/APC	
Trigger	Internal 0.01 Hz to 100 MHz; external 0 to 100 MHz.	
Pulse Width	Internal 3 ns to 640 s.	
Impulse	</= 1 ns typical (fixed).	
Delay	0 to 640 s (plus fixed delay)	
Module Delay	10 ns typical (fixed) mainframe's Pulse Out to module's light output. Jitter 100 ps rms.	

4) Qty = 1, Optical Pulse Generator Module, 850 nanometer, Model 085 OR Equal Brand in accordance with the following specifications:

Spectral Peak	=	850 nm +/- 15 nm
Spectral Width	</=	5 nm
Power Levels	=	Variable 0-2 mW
Resolution	</=	100 uW
Rise Time	</=	1 ns
Fall Time	</=	1 ns
Dynamic Range	>/=	13 dB
Fiber Type	6/125 Single Mode Fiber singlemode Connector	
Fiber Connector	FC/APC	
Trigger	Internal 0.01 Hz to 100 MHz; external 0 to 100 MHz.	
Pulse Width	Internal 3 ns to 640 s.	
Impulse	</= 1 ns typical (fixed).	
Delay	0 to 640 s (plus fixed delay)	
Module Delay	10 ns typical (fixed) mainframe's Pulse Out to module's light output. Jitter 100 ps rms.	

5) Qty = 1, Electrical Pulse Generator Module, Model 201E OR Equal Brand in accordance with the following specifications:

Output amplitude	>/=	5V into 50 ohms
Output offset	>/=	+/- 5V
Max rep rate	>/=	100 MHz
Rise time	</=	180 ps
Trigger	Internal 0.01 Hz to 100 MHz; external 0 to 100 MHz.	
Pulse Width	Internal 1 ns to 640 s.	
Delay	0 to 640 s (plus fixed delay)	
Module Delay	10 ns typical (fixed) mainframe's Pulse Out to module's light output. Jitter 100 ps rms.	